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**ABSTRACT**

In recent years, the study of the self has been concentrated in the areas of self-esteem, individual differences in self-relevant cognition, and the processes of self-relevant cognition. To validate understanding of the individual difference dimensions of public and private self-consciousness and self-esteem, college students (N=101) completed the Self-Consciousness Scale and two self-esteem measures, the Rosenberg Self-Esteem Scale (S-E) and the Texas Social Behavior Inventory (TSBI). In addition, they generated lists of self-relevant knowledge in nine categories. Analysis of the results indicated the the correlation between private self-consciousness and the grouped-category measure of private self-knowledge production was near zero, as was the correlation between public self-consciousness and the measure of production of public self-knowledge. The measure of social anxiety correlated negatively with all but one measure of knowledge productivity and positively with all the measures of overlap for the self-knowledge measures. The data pattern for social anxiety was approximately a mirror image of the patterns for the two self-esteem measures, indicating that the social anxiety measure has some properties of a self-esteem scale with reversed direction of measurement. Self-relevant knowledge production was better predicted by measures of self-esteem and social anxiety than by measures of public and private self-consciousness. (NRB)

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SELF-ESTEEM, SELF-CONSCIOUSNESS, AND ACCESS TO SELF-RELEVANT  
KNOWLEDGE

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Self-Esteem, Self-Consciousness, and Access to Self-Relevant Knowledge

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**Abstract.** Subjects (101 college students) (i) completed measures of self-consciousness and self-esteem and (ii) generated lists of self-relevant knowledge in 9 categories. Contrary to expectation, self-relevant knowledge production was better predicted by measures of self-esteem and social anxiety than by measures of public and private self-consciousness.

In recent years, the study of the self has been active in three areas: First, there has been renewed interest in the long-studied dimension of self-esteem (Wylie, 1974, 1979); second, there are novel measures of individual differences in self-relevant cognition (e.g., Fenigstein, Scheier & Buss, 1975; Snyder, 1974; Gur & Sackais, 1979); and, third, there have been many studies of the processes of self-relevant cognition (Carver & Scheier, 1981; Greenwald & Pratkanis, 1984; Kihlstrom & Cantor, 1983; Markus, 1977; McGuire & McGuire, 1982).

The study that I will be describing brought these themes together in an attempt to validate our understanding of some individual-difference dimensions that have appeared frequently in recent studies -- namely, public and private self-consciousness and self-esteem. The established interpretations of measures of these dimensions have clear implications for access to knowledge about oneself. For example, subjects high in self-esteem should have more ready access to favorable self-knowledge than do subjects low in self-esteem.

Such implications have been tested in a few previous studies in which the measure of access to self-knowledge has been reaction time to judge self-descriptiveness of traits. Our study measured access to self-knowledge by asking subjects to produce as much self-knowledge as they could, in a series of categories, under moderate time pressure.

Method

**Subjects.** Data were collected from 58 subjects at Ohio State University and 43 at Ohio University. At both schools, participants were student volunteers from introductory psychology courses. When volunteering, students were asked to appear for two sessions scheduled exactly one week apart. Data were collected by timed administration of booklet measures in a classroom setting, in groups of about 20 subjects at a time. Data from the two schools were combined, after preliminary analyses showed no significant seen differences in either the personality measures or the measures based on knowledge production.

OVERHEAD 1

Procedure. In each of the two sessions, exactly the same sequence of

tasks was used. First, subjects responded to a series of 13 items, each of which requested listing of items in a specified category. (The categories were described to subjects with just enough detail to be, we hoped, unambiguous. For example, for "activities that you enjoy," subjects were asked, "Write down a list of the activities that you enjoy. These can be such things as hobbies, amusements, and sports.") Subjects were given a limit of three minutes to respond to each of the 13 categories, which are shown in the order they were administered.

Next, and last, subjects completed three personality scales, which included two measures of self-esteem, the Rosenberg Self-Esteem Scale (S-E -- Rosenberg, 1965), and the Texas Social Behavior Inventory (TSBI -- Helreich, Stepp, & Ervin, 1974). The third personality scale, the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975), provides three measures -- private self-consciousness (defined as the disposition to attend to socially unavailable, or private, aspects of the self), public self-consciousness (the disposition to attend to socially available, or public, aspects of the self), and social anxiety (concern about self-presentation in social situations).

Procedure for the second session was identical to that for the first. The purpose of conducting the second session was to examine the similarity of knowledge accessed on two occasions.

## OVERHEAD 2

Scoring of category lists. For each of the 13 category lists, two scores were obtained: (i) Productivity -- the average number of items listed in the two attempts (a week apart) to produce items in the category; and (ii) Overlap -- the geometric mean proportion of items produced at the first session that were also produced at the second. (Because of limited time, I will focus on the productivity measures, which were more focal to our attempt to validate the self-consciousness and self-esteem measures.)

## Grouped-Category Measures

## OVERHEAD 3

Our major correlational analyses made use of measures consisting of average productivity and overlap scores, computed across selected categories of self knowledge. These were as follows:

Public and Private Subsets of Self-Knowledge Measures. Six of the self-knowledge categories were identified, a priori, as indexes of private self-knowledge. These were the ones that requested subjects' affective reactions to people, to activities, and to their own personal qualities. We considered these evaluative reactions to be private self-knowledge, known to oneself but not directly observable by others. The remaining three self-knowledge categories were identified as indexes of public self-knowledge (group memberships, daily activities, and physical appearance). A priori, these are categories for which the generated information might be provided as readily by an observer as by the subject.

Affective Subsets of Self-Relevant Measures. Four of the self-

knowledge categories were identified, a priori, as affectively positive ones (liked people, group memberships, good qualities, and liked activities) and three others were identified as affectively negative (disliked people, bad qualities, and disliked activities).

### Hypotheses and Results

We expected that the private and public self-consciousness measures would be positively related to the measures based on production of private and public self-knowledge, respectively. And we expected that the self-esteem measures would be positively related to production of affectively positive self-knowledge, but negatively related to production of affectively negative self-knowledge.

The correlations of the personality measures with the 13 individual-category measures of productivity and overlap are presented on the handout table. The major focus of analyses was, however, on the grouped-category measures, which are shown on the next overhead. Underlining indicates the highest two correlations in each column -- that is, the highest two correlations for each personality measure.

#### OVERHEAD 4

In regard to private self-consciousness, the expected correlation with the grouped-category measure of private self-knowledge production was weak -- near zero. Surprisingly, the highest correlation involving private self-consciousness was with the grouped-category measure of public self-knowledge productivity.

In regard to public self-consciousness, again the expected correlation with the measure of production of public self-knowledge was near zero. The strongest correlations of public self-consciousness were unpredicted ones, with some of the overlap measures.

We had made no particular predictions regarding social anxiety. (This measure was included in the study primarily because it is an inseparable companion of the two self-consciousness measures.) Remarkably, this tag-along measure showed the strongest set of intercorrelations with other measures. It correlated negatively with all the measures of knowledge productivity except for the negative affect subset of self-knowledge, and positively with all the measures of overlap for the self-knowledge measures.

It was expected that the two self-esteem measures would correlate positively with the production of affectively positive self-knowledge, and negatively with the production of affectively negative self-knowledge. Just this pattern of correlations was observed for the Rosenberg self-esteem measure. The TSI self-esteem measure was significantly correlated with positive self-knowledge production, but not with negative self-knowledge production.

The data pattern for social anxiety was approximately a mirror image of the patterns for the two self-esteem measures, indicating that the social anxiety measure has some of the properties of a self-esteem scale with reversed direction of measurement. (Consistent with that interpretation,



note the negative correlations of social anxiety with the self-esteem measures on the handout table. This significant negative relationship between social anxiety and self-esteem has also been found in other studies -- Breckler, 1981; Turner, Schaefer, Carver, & Ickes, 1978.)

### Discussion and Conclusions

What do these results mean? Their interpretation depends importantly on whether or not our measures of knowledge productivity are considered to be valid indicators of access to private, public, affectively positive, and affectively negative self-knowledge.

If the productivity measures do genuinely measure access to categories of self-knowledge, then our results provide good validation evidence for the two self-esteem measures, and also for an interpretation of the social anxiety measure as a negative indicator of self-esteem. The Rosenberg self-esteem measure conformed closest to theoretical expectation, being significantly correlated, in the expected directions, with the grouped-category measures of both affectively positive and affectively negative self-knowledge.

On the other hand, our results provided little evidence for validity of the private and public self-consciousness measures. Particularly surprising was the fact that private self-consciousness correlated positively and significantly with our measure of productivity of public self-knowledge. The only aspect of the findings that was consistent with expectation for the private self-consciousness scale was that it positively and significantly predicted productivity in two of the six private self-knowledge categories -- good and bad personal qualities.

The most plausible alternative to assuming that our productivity measure validly indicates access to self-knowledge is to assume that it measures strategic self-presentation. In terms of a self-presentation interpretation, the correlations between self-esteem measures and productivity in affectively positive categories could be interpreted as indicating consistency in favorability of self-presentations. That is, the same subjects who present themselves favorably on the self-esteem and social anxiety measures also present themselves favorably by listing relatively more affectively positive than affectively negative items of self-knowledge.

The valid-access-to-self-knowledge and strategic-self-presentation interpretations of our findings are not mutually exclusive. Both may be correct, in that performance in our study might represent a mixture of access to genuine self-knowledge and strategic self-presentation; or these processes might characterize different subjects to different degrees.

Our findings relate importantly to an interpretative issue raised by Ruth Wylie (1974) and recently reemphasized by William McGuire (McGuire & McGuire, 1982; McGuire & Padewer-Singer, 1976). They have observed disparagingly that most self-concept measures focus on self-esteem. McGuire has argued that there is a pressing need for measures that tap domains of self-knowledge other than its self-evaluative aspect. The procedures of the present study took McGuire's recommendations into account by obtaining self-knowledge in a variety of categories; the categories we used were, in fact,

the ones that McGuire found to be most prominent in productions made in response to the nonspecific probe, "Tell me about yourself."

McGuire and Wylie say well be disappointed by our major finding -- that production of self-knowledge was better predicted by self-esteem and social anxiety measures than by the less self-evaluative measures of private or public self-consciousness. The present findings, in this respect, fit well with a variety of recent theoretical accounts in which self-evaluation is regarded as a fundamental organizing factor of personality (Breckler & Greenwald, in press; Greenwald & Breckler, 1985; Greenwald & Pratkanis, 1984; Paulhus, 1984; Tetlock & Manstead, 1985; Schlenker, 1982). Perhaps self-evaluation is, after all, at the heart of self-knowledge.

#### REFERENCES

- Breckler, S. J. (1981). Self-referent cognition and personality. Unpublished M. A. thesis, Ohio State University, Columbus, OH.
- Breckler, S. J., & Greenwald, A. G. (in press). Motivational facets of the self. In R. M. Sorrentino & E. T. Higgins (Eds.), The handbook of motivation and cognition. New York: Guilford, in press.
- Carver, C. S., & Scheier, M. F. (1981). Attention and self-regulation: A control-theory approach to human behavior. New York: Springer-Verlag.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. Journal of Consulting and Clinical Psychology, 43, 522-527.
- Greenwald, A. G., & Breckler, S. J. (1985). To whom is the self presented? In B. R. Schlenker (Ed.), The self and social life. New York: McGraw-Hill.
- Greenwald, A. G., & Pratkanis, A. R. (1984). The self. In R. S. Wyer & T. K. Srull (Eds.), Handbook of social cognition (Vol. 3). Hillsdale, NJ: Erlbaum.
- Gur, R. C., & Sackais, H. A. (1979). Self-deception: A concept in search of a phenomenon. Journal of Personality and Social Psychology, 37, 147-169.
- Halareich, R., Stapp, J., & Ervin, C. (1974). The Texas Social Behavior Inventory: An objective measure of self-esteem or social competence. Journal Supplement Abstract Service. Catalog of Selected Documents in Psychology, 4, 79.
- Kihlstrom, J. F., & Cantor, N. (1983). Mental representations of the self. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 16?). New York: Academic Press.
- Markus, H. (1977). Self-schemas and processing information about the self. Journal of Personality and Social Psychology, 35, 63-78.

- McGuire, W. J., & McGuire, C. V. (1982). Significant others in self-space: Sex differences and developmental trends in the social self. In J. Suls (Ed.), Psychological perspectives on the self (Vol. 1). Hillsdale, NJ: Erlbaum.
- McGuire, W. J., & Padawer-Singer, A. (1976). Trait salience in the spontaneous self-concept. Journal of Personality and Social Psychology, 33, 743-754.
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. Journal of Personality and Social Psychology, 46, 598-609.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Schlenker, B. R. (1982). Translating actions into attitudes: An identity-analytic approach to the explanation of social conduct. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 15). New York: Academic Press.
- Snyder, M. (1974). Self-monitoring of expressive behavior. Journal of Personality and Social Psychology, 30, 526-537.
- Tetlock, P. E., & Hastorf, A. S. R. (1985). Impression management versus intrapsychic explanations in psychology: A useful dichotomy? Psychological Review, 92, xxx-xxx.
- Turner, R. G., Scheier, M. F., Carver, C. S., & Ickes, W. (1978). Correlates of self-consciousness. Journal of Personality Assessment, 42, 285-289.
- Wylie, R. (1974). The self-concept (Vol. 1). Lincoln, NB: University of Nebraska Press.
- Wylie, R. (1979). The self-concept (Vol. 2). Lincoln, NB: University of Nebraska Press.



## OVERHEAD 1

### PROCEDURE

#### WEEK 1

##### 1. LIST ITEMS IN 13 CATEGORIES (3 MIN EACH)

fish  
trees  
names of people you like  
names of people you dislike  
your good qualities  
your bad qualities  
activities you do every day  
activities that you enjoy  
activities that you dislike  
describe your physical appearance  
groups that you belong to  
fruits  
birds

##### 2. COMPLETE PERSONALITY SCALES

Rosenberg Self-Esteem Scale  
Texas Social Behavior Inventory  
Self-Consciousness Scale

#### WEEK 2

(EXACTLY THE SAME PROCEDURE)

## OVERHEAD 2

### MEASURES FOR EACH CATEGORY

$$\text{PRODUCTIVITY} = \frac{n_1 + n_2}{2}$$

$$\text{OVERLAP} = \frac{n_{12}}{\sqrt{n_1 n_2}}$$

$n_1$  = No. of items produced  
at Session 1

$n_2$  = No. of items produced  
at Session 2

$n_{12}$  = No. of items produced  
identically at  
both sessions

## OVERHEAD 3

### RESPONSE CATEGORIES AND GROUPED-CATEGORY MEASURES

#### 4 SEMANTIC CATEGORIES

fish  
trees  
fruit  
birds

#### 9 SELF-KNOWLEDGE CATEGORIES

PUBLIC SELF	/	daily activities		
		physical appearance		
	\	group memberships	\	
	/	liked people		AFFECTIVELY POSITIVE
		good qualities		
PRIVATE SELF		liked activities	/	
		disliked people	\	
		bad qualities		AFF. NEGATIVE
	\	disliked activities	/	

## OVERHEAD 4

### CORRELATIONS AMONG PERSONALITY MEASURES AND ACCESS TO SEMANTIC AND SELF-KNOWLEDGE

(N = 101)

	PERSONALITY MEASURES				
	priv. s-c	publ. s-c	soc anx	Ros'g s-e	TSBI s-s
<u>PRODUCTIVITY MEASURES</u>					
4 Semantic	.15	-.15	-.20*	-.02	.15
9 Self-knowl.	.12	.01	-.27**	.12	.29**
private self	.07	.04	-.27**	.11	.25**
public self	.18*	-.05	-.22*	.09	.28**
pos. affect	.05	-.08	-.36***	.25**	.37***
neg. affect	.11	.15	-.02	-.17*	-.01
<u>OVERLAP MEASURES</u>					
4 Semantic	.09	.19*	.08	-.02	-.03
9 Self-knowl.	.03	.17*	.29**	-.11	-.12
private self	.05	.17*	.27**	-.09	-.11
public self	-.01	.09	.20*	-.10	-.08
pos. affect	.05	.22*	.21*	-.06	-.12
neg. affect	.01	.11	.25**	-.11	-.09

\*p < .05

\*\*p < .01

\*\*\*p < .001

INDIVIDUAL DIFFERENCES IN ACCESS TO SELF-RELEVANT KNOWLEDGE

Correlations of Personality Measures with  
Individual-Category Productivity and Overlap Scores

(N = 101)

PERSONALITY MEASURES

Priv SC    Publ SC    Soc anx    Roa S-E    TSBI S-E

PERSONALITY MEASURE INTERCORRELATIONS

Public Self-Consciousness	.40***				
Social Anxiety	.09	.27**			
Rosenberg Self-Esteem	-.12	-.24**	-.33***		
TSBI Self-Esteem	-.04	-.15	-.69***	.59***	

CORRELATIONS WITH SELF-KNOWLEDGE CATEGORY PRODUCTIVITY MEASURES

Liked persons	-.05	.09	-.25**	.16	.23*
Disliked persons	-.03	.09	-.06	.07	.07
Good personal qualities	.22*	-.12	-.41***	.33***	.42***
Bad personal qualities	.24**	.17*	-.04	-.33***	.11
Liked activities	.07	-.18*	-.17*	.12	.25**
Disliked activities	.12	.10	.08	-.26**	-.06
Daily activities	.06	.03	-.20*	.15	.31***
Physical characteristics	.37***	.11	.06	-.17*	-.02
Group memberships	.07	-.25**	-.26**	.18*	.27**

CORRELATIONS WITH SELF-KNOWLEDGE CATEGORY OVERLAP MEASURES

Liked persons	.23**	.23**	.24**	-.06	-.11
Disliked persons	.14	.21**	.28**	-.09	-.08
Good personal qualities	.04	.16	.02	-.03	-.02
Bad personal qualities	.10	-.06	-.02	-.01	-.02
Liked activities	-.07	.01	.16	.03	-.09
Disliked activities	-.22**	.06	.24**	-.13	-.09
Daily activities	.01	-.05	.20*	.03	-.03
Physical characteristics	.01	.11	.14	-.16	-.04
Group memberships	-.03	.13	.11	-.08	-.09

CORRELATIONS WITH SEMANTIC CATEGORY PRODUCTIVITY MEASURES

Fish	.06	-.12	-.15	.01	.08
Trees	.04	-.27**	-.26**	.10	.20*
Fruit	.25**	.02	-.18*	-.03	.18*
Birds	.12	-.10	-.08	-.11	.05

CORRELATIONS WITH SEMANTIC CATEGORY OVERLAP MEASURES

Fish	.07	.06	.10	.15	.03
Trees	-.02	.03	.04	.01	-.01
Fruit	.03	.19*	-.01	-.10	-.03
Birds	.14	.20*	.07	-.12	-.05

\*p < .05    \*\*p < .01    \*\*\*p < .001

Note: The three highest correlations in each column (excluding personality measure intercorrelations) are underlined.